#15 3/15/01 AF 2733

Docket No.: 50107-332

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of

ERIC VOIT, et al.

Serial No.: 08/821,027 — Group Art Unit: 2733

Filed: March 19, 1997 — Examiner: J. Kwoh

For: VOICE CALL ALTERNATIVE ROUTING THROUGH PSTN AND INTERNET NETWORKS

RESUBMISSION OF APPEAL BRIEF

Assistant Commissioner for Patents
Washington, DC 20231

Sir:

Submitted herewith in triplicate are true copies of Appellants' Appeal Brief and transmittal in support of the Notice of Appeal filed February 4, 2000. Also included is a post card receipt date stamped by OPIE (Patent and Trademark Office) that indicates filing of the Appeal Brief in triplicate, with fee charge authorization for the $300.00 Appeal Brief fee, on April 4, 2000.

These papers are submitted pursuant to a telephone call received by the undersigned attorney from Examiner Kwoh on March 12, 2001. In the telephone call, Mr. Kwoh stated that he noted that the official file included a Notice of Appeal, dated February 4, 2000, but that no Appeal Brief was in the file. Mr. Kwoh's attention to this matter is appreciated.

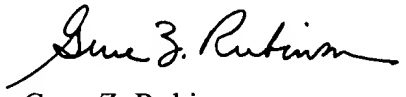
In fact, an Appeal Brief was prepared and filed in triplicate on April 4, 2000, as evidenced by the copy of the post card receipt. Apparently these papers were not correlated with the application. In view of the delay of close to one year, Appellant respectfully requests that this application be handled on an expedited basis.

The original Appeal Brief transmittal included, to the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136. Please charge any shortage in fees due in

connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

MCDERMOTT, WILL & EMERY



Gene Z. Rubinson
Registration No. 33,351

600 13th Street, N.W.
Washington, DC 20005-3096
(202) 756-8000 GZR:lnm
Date: March 12, 2001
Facsimile: (202) 756-8087

Applicant: Eric Vort et al. Docket No. 50107-332

Title/Mark: Voice Call Alternative ... Serial/Reg./Patent No. 08/821,027

Date Sent: 4/4/00 ☐ Hand Carried ☐ 1st-Class Mail ☐ Cert. of Mailing ☐ Express Mail No.

☒ Transmittal Letter

☐ Utility/Design/Continuation/CIP/FWC/Divisional/PCT

☒ Other

____ pages of Specification

____ pages of Claims

____ pages of Abstract

____ pages of Formal/Informal Drawings

☐ Information Disclosure Statement

____ Form PTO 1449

____ copies of cited references

☒ Preliminary Amendment

☒ Response to Missing Parts Notice

☒ Certified Copy of Priority Doc.

☒ Claim for Convention Priority

☒ Verified Statement of Small Entity Status

☒ Transmittal of Issue Fee: Form PTO 85b ___ Form PTO 85C ____

☒ Maintenance Fee for ____ years after grant

☒ Notice of Appeal ☒ Appeal Brief — in triplicate

☐ Recordation of ____ Patent ____ Trademark: Assignments/Security Agreements/ ____

☒ Response/Amendment to Office Action of ____ ☐ Petition to Commissioner for ____

☐ Trademark/Service Mark/Intent-To-Use Application

☐ Amendment to Allege Use ☐ Statement of Use

☐ Formal/Informal/Substitute Drawing Sheet

____ (no. of) Substitute/Specimens

☐ Continued Use Affidavit/Declaration (Section 8 & 15)

☐ Notice of Opposition/Answer to ____

☒ Ex Parte Appeal

☐ Petition for Cancellation/ Answer to ____

☐ Renewal of Reg. No. ____

☐ Combined Declaration/Power of Attorney

☐ Letter of Protest

☒ Request for ____-day/month Extension of Time

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THE PATENT AND TRADEMARK OFFICE DATE STAMPED HEREON IS ACKNOWLEDGEMENT THAT THE ITEMS, CHECKED ABOVE, WERE RECEIVED BY THE PTO ON THE DATE STAMPED.

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TRANSMITTAL OF APPEAL BRIEF

Assistant Commissioner for Patents
Washington, DC 20231

Sir:

Submitted herewith in triplicate is Appellant(s) Appeal Brief in support of the Notice of Appeal filed February 4, 2000. Please charge the Appeal Brief fee of $300.00 to Deposit Account 500417.

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Respectfully submitted,

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Gene Z. Rubinson
Registration No. 33,351

600 13th Street, N.W.
Washington, DC 20005-3096
(202) 756-8000 GZR:lnm
Date: April 4, 2000
Facsimile: (202) 756-8087

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APPEAL BRIEF

Assistant Commissioner for Patents
Washington, DC 20231

This Brief is submitted pursuant to the appeal of the final rejection of claims 1, 2, 4 through 21, 23 and 24, filed February 4, 2000.

REAL PARTY IN INTEREST

The real party in interest in this application is Bell Atlantic Network Services, Inc.

RELATED APPEALS AND INTERFERENCES

No other appeals or interferences are believed to affect or be affected by a decision in this appeal.

STATUS OF CLAIMS

All pending claims 1, 2, 4 through 21, 23 and 24 stand under final rejection.

STATUS OF AMENDMENTS

No Amendments have been proposed after the final rejection.

SUMMARY OF INVENTION

The present invention provides communication of a voice call through a public data packet network, such as the Internet, if the quality of service through the data packet network is satisfactory. For convenience of description, the term "Internet" is used hereinafter generically to refer to a public data packet internetwork. Fig. 3 is a high level block diagram of network architecture illustrative of the context of the invention. An individual subscriber to the public switched telephone network (PSTN) may choose to place a voice call from the telephone 12, which has a local subscriber line connection to central switching office 13, to a remote destination telephone 12, which is connected to local central switching office 17, via the Internet 50 to bypass long distance interexchange carrier routing through the public switched telephone network 10, thereby reducing the expense of the call. A caller can designate a call for Internet routing by inputting an appropriate key pad sequence, which is a unique service code, in addition to the destination telephone number when dialing the call.

A call routed through Internet 50 is transmitted through Internet Modules 92 and 94 so that appropriate protocol conversion between telephone network protocol and Internet TCP/IP protocol can take place. Voice telephone signals originating from the switching offices of the call parties are converted to TCP/IP packet data by respective modules for transmission through the Internet and the packet data are then converted back to telephone network protocol signals at the remote modules. Since the quality of service available through the data packet network varies due to factors such as traffic congestion, etc., at any given time such a communication path may not

provide acceptable voice quality. A subscriber may predefine an acceptable level of service by selecting a particular threshold quality level, or a default threshold level can be applied. The level of quality of service of the Internet is continuously monitored. If the detected level of service does not meet the predefined threshold quality level when a call is initiated, the call will be routed through the PSTN 10 and thus avoid the Internet path.

Call routing is under the control of the common channel signaling supervision of the PSTN AIN system network. The AIN system *per se* is a known telephone control system applied through the common channel signaling network, represented in the block diagram of Fig. 2. Integrated services control point (ISCP) 40, having processing and storing capability, maintains subscriber call processing records (CPRs) that contain subscriber's customized service information. A CPR would include Internet call subscription status, identification of an interexchange carrier, predefined quality threshold level, etc. The AIN system recognizes, through central office switching system triggering, whether a call is indicated for Internet routing, identifies a particular quality level of acceptability that has been predesignated by the calling subscriber, and determines whether the call is to be routed through the Internet or not in response to comparison of the monitored quality level with the predesignated level. If the threshold level is exceeded, the telephone call is routed to the destination station through the Internet in packet data format. If the threshold level is not exceeded, the voice call is routed to the destination station through the switched voice network, which may include an interexchange long distance carrier path, in PSTN network protocol.

The ability to input the unique service code in the dialed number gives the calling subscriber the option to invoke the Internet routing service on a per-call basis. In a further disclosed embodiment, calls that are to be routed through the Internet may be selected on a predefined basis. With this embodiment, the subscriber's CPR in the ISCP can contain preselected

conditions for which routing through the Internet will occur, subject to acceptable quality of service in the network at the time of a call. Such preselected conditions can include any combination of time of day, day of week, destination areas, or specific destination telephone numbers. Of course, the CPR may be set to attempt Internet routing for all interlata calls if so desired. The per-call basis feature can be used in conjunction with the predefined embodiment so that the caller can designate Internet routing, although the call would not have been so designated by the CPR.

Reference is made to the specification for a more detailed description of the invention.

Claims 1 and 21 are the sole independent claims. Claim 21 is presented below with elements read on drawing figures, as urged in MPEP 1206.

> 21. A communications network comprising:
>
> a switched telecommunications network (10, 13, 14, 16, 17-Fig. 3) having interconnected central office switching systems (13, 17) and having subscriber lines connected to said central office switching systems providing connection between terminals (12) connected to said subscriber lines, each of said central office switching systems responding to a service request on a subscriber line connected thereto to selectively provide a communication connection between the requesting line and another selected subscriber line through the connected central office switching system or through the connected central office switching system and at least one other central office switching system;
>
> a separate control network (31, 40) for said switched telecommunications network comprising a common channel interoffice signaling network including signal transfer points (31) connected to said central office switching systems through signal switching points via links (dotted line connections) between said signal switching points and signal transfer points;
>
> a data network (50) separate from said switched telephone network comprising multiple remotely spaced routers (52, 54, 56-Fig. 1) for linking together paths of said data network using transmission control protocols to provide connectionless packet service between remote locations of said data network;
>
> at least two of said central office switching systems (13, 17) having connected thereto an interface (92, 94) to said data network, said central office switching systems providing selective connection between said interfaces and the subscriber lines connected to each of said central office switching systems;

wherein each interface includes capability to invoke a quality test application for determining the quality of service in said data network; and

wherein said control network comprises means (40) responsive to the quality of service in the data network for selectively routing a voice call originating from a first central office switching system to a second central office switching system destination through said data network only if said quality of service exceeds a predetermined threshold level.

As stated in the section of the Manual noted above, the claims are not to be limited to this embodiment by such reading.

ISSUES

(1). Whether claims 1, 6 through 8 and 21 are anticipated by Jones (hereinafter "Jones") under 35 USC § 102(e).

(2). Whether claims 2, 6 and 23 are unpatentable over Jones under 35 USC § 103(a).

(3). Whether claims 4, 5, 9 through 20 are unpatentable over Jones in view of Bartholomew et al. (hereinafter "Bartholomew") under 35 USC § 103(a).

GROUPING OF CLAIMS

The claims each contain specific individual recitations which, in context, are believed to warrant separate consideration for patentability.

THE REJECTIONS

Claims 1, 6 through 8 and 21 stand under final rejection under 35 USC § 102(e) as being anticipated by Jones. A statement of the rejection of record appears at paragraph 2 of the final Office Action. The Examiner's position therein is stated to be that Jones discloses routing a voice telephone call to a called station either through the public data packet network if a predetermined

quality threshold therein is exceeded or through an Interexchange carrier switched network if the quality threshold is not exceeded. In response to appellant's arguments submitted in disagreement of such position, paragraph 6 of the Office Action refers to passages of Jones at column 2, lines 64-67, column 6, lines 37-67, and column 7, lines 1-35 as a basis for maintaining the position.

Claims 2, 6 and 23 stand under final rejection under 35 USC § 103(a) as being unpatentable over Jones. Paragraph 4 of the final Office Action states the rejection. The Office Action, which does not specifically identify differences between the claims and Jones, purports that Fig. 5 of Jones discloses completing a call through an Interexchange carrier switch network if the threshold level is not exceeded. It is further held that use of a unique service code in general is well known, from which holding it is concluded that it would have been obvious to use a service code specifically in Jones to allow the placement of a call.

Claims 4, 5, 9 through 20 and 24 stand under final rejection under 35 USC § 103(a) as being unpatentable over Jones in view of Bartholomew, as set forth in paragraph 5 of the final Office Action. Bartholomew is relied upon for disclosure of AIN network elements used to retrieve an interexchange carrier identity. The office action characterizes the function of "compare[ing] only if dialed information match information stored in the SCPR (sic) in order to conserve resources and only process information where it is the intended recipient" as "design choice." The Office Action further concedes that Jones does not disclose the interface components recited by claim 24. For these missing elements, Bartholomew is relied upon for disclosure. It is then concluded that it would have been obvious to "include the components as taught by Bartholomew et al. with the system disclosed by Jones in order to allow the gateway to switch selectively calls to the desired module."

THE APPLIED REFERENCES

Jones discloses a cable communications system in which upstream and downstream fiber trunks are distributed between a cable head-end location (102-Fig. 1) and a plurality of subscribers. This distribution network is characterized as prior art basic cable system architecture in which a plurality of branches 118 each can serve a plurality of serving areas with inclusion therein of trunk amplifiers 120 and bi-directional line extenders 122. The head-end is linked, on the non-subscriber end, to PSTN 108 and Internet 110 as shown in Fig. 3. The Jones disclosure focuses on Fig. 2 and the functionality of the elements depicted therein. These elements are located at a subscriber's premises and form an "enhanced CAU(cable access unit)" 212, which is connected to the fiber distribution network by a coaxial line. Within the customer premises various communication equipment is connected with the CAU, by coax to video 200, by ISDN connection to computer 206 and video conferencing unit 204, and by a standard telephone RJ11 POTS connection to telephone 202. Computer 206 is also connected through modem 208 in a 10baseT link to the coax. Router 210 provides an alternative data path for computer 206 when upstream data transmissions or downstream data transmissions require a higher quality of service than provided through the coaxial cable connection (column 4, lines 41-58). The alternative data paths differ from each other in that they are either "shared" or "unshared." Jones describes what is meant by these terms at column 2, lines 31-51, excerpts of which are copied below:

> [S]hared connections are connections for **transmitting data** in which data packet units being transmitted between two communications units are intermixed with data packets being transmitted by other communications units in the same connection, such as, for example, packet switching using a packetized data connection. An unshared connection is a **data connection** dedicated between two communications units in which **data being transferred** between the communications units are not intermixed with other data, such as, for example, circuit switching using a dedicated circuit-switch connection (emphasis supplied).

In the operation of Fig. 5 (described in column 6), if, in a normal shared packet data call, the QoS is out of the acceptable range, "the process then initiates intracommunications system ISDN circuit switched **data call** from CAU's ISDN/ethernet router to the head-end's ISDN/ethernet router to switch the **data call** from a shared connection to an unshared connection . . . .(lines 30-37, emphasis supplied)".

Bartholomew discloses a PSTN AIN network in which communication control capability is enhanced by the provision of an Intelligent Peripheral that is used in cooperation with the ISCP. The network can provide both narrowband and broadband services. Such services may involve communication solely through the PSTN or in combination with data networks such as the Internet.

ARGUMENT

1. Claims 1, 6 through 8 and 21 are not anticipated by Jones under 35 USC § 102(e).

It is well settled that anticipation, under 35 U.S.C. § 102, requires that each element of a claim in issue be found, either expressly described or under principles of inherency, in a single prior art reference. ***Kalman v. Kimberly-Clark Corp.,*** 713 F.2d 760, 218 USPQ 781 (Fed. Cir. 1983); ***Richardson v. Suzuki Motor Co.,*** 868 F.2d 1226, 9 USPQ2d 1920 (Fed. Cir. 1989) *cert. denied,* 110 S.Ct. 154 (1989). The term "anticipation," in the sense of 35 U.S.C. 102, has acquired the accepted definition meaning "the disclosure in the prior art of a thing substantially identical with the claimed invention." ***In re Schaumann***, 572 F.2d 312, 197 USPQ 5 (CCPA 1978). The initial burden of establishing a basis for denying patentability to a claimed invention rests upon the Examiner. ***In re Fine***, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); ***In re Thorpe,*** 777 F.2d 695, 227 USPQ 964 (Fed. Cir. 1985); ***In re Piasecki,*** 745 F.2d 1468, 223 USPQ 785 (Fed. Cir. 1984). To satisfy this burden, therefore, each and every element of the claimed invention must be

shown by the Examiner to be disclosed in Jones. Appellant respectfully asserts that the record fails to meet this requirement.

Independent claim 1 requires a method for providing voice communication between stations at two remote locations that are each linked to public switched telephone networks (PSTNs), the method being responsive to placement of a voice telephone call by one of the stations to determine quality of service of a public data packet network, such as the Internet. Jones does not disclose this subject matter.

Jones monitors quality of service on active packet data calls (column 6) to make a determination of shared or unshared connection for a data call, not a voice call. The coax and ISDN connections to the original CAU are disclosed only as transmitting data calls. It is submitted that there is nothing in Jones to suggest that voice calls are communicated through these connections. Jones, in fact, discloses otherwise, as the POTS ("plain old telephone service") telephone 202 is connected to the original CAU through separate RJ11 connection. The Examiner's response to this position (paragraph 6 of the Office Action) points to column, lines 64-67 as disclosing telephone service. This portion of Jones merely describes the system as providing "telephone services and data transmission services along with cable television services on a coaxial fiber-optic cable television infrastructure." With respect to voice calls, a reasonable interpretation of the quoted portion is that telephone services mentioned are supplied to the POTS telephone 202. The quoted portion in fact treats telephone services as a separate realm of services from data transmission services. It is again submitted that Jones does not disclose that data transmission services are applicable to voice calls. The further reference in the Office Action to column 6 of Jones (discussed above) and column 7 are addressed to data calls, not voice calls. It is submitted that the lack of disclosure by Jones of this claim subject matter, in itself, is sufficient to defeat the 35 U.S.C.

§102 anticipation rejection of claim 1 and its dependent claims 6 through 8.

Claim 1 additionally requires that the voice telephone call is routed to the second station through the data packet network in packet data format if the quality of service is above the threshold level and routing the voice telephone call to the second station in PSTN network protocol through the PSTN network if the quality of service is below the threshold. The method thus requires that the voice call transmission occur in either of the two different formats, depending upon the comparison with the threshold. Jones does not disclose the alternative use of the two different claim formats. This lack of disclosure is another basis upon which it is submitted that the 35 U.S.C. §102 anticipation rejection of claim 1 and its dependent claims 6 through 8 is not viable.

Dependent claim 6 calls for exchanging signaling messages between the public switched telephone networks and said data packet network through interfaces. This recitation thus requires that each of the call stations set forth in independent claim 1 is linked to its own local PSTN that is connected to the data packet network through a respective interface. In Jones, the original CAU, which is the connection between the customer equipment and the head-end, is not a link to the PSTN but to the cable system. If a call in Jones is routed through the Internet, as shown in Fig. 3, the CAU end is directly linked to the Internet while only the remote connection can be made to a PSTN destination. Claim 8, dependent from claim 6, expressly requires that the calling station be linked to an associated PSTN different from the called station. It is submitted, therefore, that additional individual requirements of claims 6 and 8 also are not met by Jones, further bases for defeat of the anticipation rejection of claim 6 and 8.

Claim 21 is an independent claim in apparatus format. Claim 21 requires that the calling and called stations are each connected to a separate central office switching system, a voice call being transmitted through the Internet via respective interfaces if the quality of service level is

adequate or through an alternative PSTN link if the quality of service is inadequate. Claim 21 also recites details of the common channel signaling system network. It is submitted that, as discussed more fully above with respect to claim 1, the requirements of claim 21 for voice call alternative routing to PSTN destinations are not met by Jones, thereby defeating the rejection of claim 21 for anticipation by Jones.

2. Claims 2, 6 and 23 are not unpatentable over Jones under 35 USC § 103(a).

It is well settled case law precedent that, in the application of a rejection under 35 U.S.C. §103, it is incumbent upon the Examiner to factually support a conclusion of obviousness. As stated in ***Graham v. John Deere Co.*** 383 U.S. 1, 13, 148 U.S.P.Q. 459, 465 (1966), obviousness under 35 U.S.C. §103 must be determined by considering (1) the scope and content of the prior art; (2) ascertaining the differences between the prior art and the claims in issue; and (3) resolving the level of ordinary skill in the pertinent art. The Examiner must provide a reason why one having ordinary skill in the art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. ***Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.***, 776 F.2d 281, 227 USPQ 657 (Fed. Cir. 1985). ***In re Fine***, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); ***Stratoflex, Inc. v. Aeroquip Corp.***, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); ***In re Warner***, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967). The Examiner should recognize that the fact that the prior art *could* be modified so as to result in the combination defined by the claims would not have made the modification obvious unless the prior art suggests the desirability of the modification. ***In re Deminski***, 796 F.2d 436, 230 USPQ 313 (Fed. Cir. 1986). In the absence of such a prior art suggestion for modification of the references, the basis of the rejection is no more than inappropriate hindsight reconstruction using appellant's claims as a guide.

In re Warner, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967).

Claims 2 and 6 are dependent from claim 1. Claim 23 is dependent from claim 21. Claim 2 requires that placement of the voice telephone call comprises the step of entering a unique service code. This requirement is treated in the first paragraph of page 4 of the final Office Action. The Examiner concedes that Jones lacks disclosure of a unique service code. In support of the conclusion of obviousness the Office Action states: "entering a unique service code like *82 is old and well known. It would have been obvious to an ordinary person skilled in the art at the time of the invention to allow the placement of the call with this option in order to allow the network increased quality of service." It is urged that this statement begs the question of obviousness.

Jones discloses monitoring quality of service of the shared network for data calls. There is no disclosure that the calling subscriber need enter any particular code to be subject to this provision. Indeed, there is no requirement that the caller dial out to initiate the data call. Dial out is performed for a call originating from the POTS telephone 202. There is no disclosure in Jones that a voice call from that telephone may optionally be converted to packet data for transmission over either the unshared or shared connection. Even if the use of service codes in dialing to activate a service on a per-call basis generally had been well-known, as the Examiner asserts, an artisan would have found no reason to provide a service code in the Jones system for the purpose required by claim 2. In summary, in Jones there is no disclosure that the quality monitoring/alternative shared/unshared routing of data calls is selectively initiated by the subscriber. As this service is generally active, there is no reason why the user would have needed such a code. Even if one were to modify the Jones disclosure to make the service selective, a modification that would appear to serve no purpose, the artisan would have found no reason to modify the system to provide for a dial up service code for data calls that require no dial up. While the use of dial up service codes may be

afforded the telephone 202 for selecting particular network services, one would not provide a dial up service code for a non-existent service. Jones does not teach that a call from telephone 202 is switched between the shared and unshared communication link in accordance with monitored quality of service in the shared data path.

Claim 6 has also been rejected under 35 U.S.C. §102 for anticipation by Jones, as discussed above. While in general a claim can be subject to rejection on grounds of both 35 U.S.C. §102 and 35 U.S.C. §103, the Office Action has not identified a difference between Jones and claim 6, a duty imposed by ***Graham v. John Deere Co***, let alone the other requirements for establishing *prima facie* obviousness. It is submitted, therefore, that the rejection of claim 6 under 35 U.S.C. §103 should not be sustained.

Claim 23 identifies the data packet network of claim 21 as the Internet. Claim 23 has not been rejected under 35 U.S.C. §102. It is submitted that claim 23 distinguishes from the Jones for the same reasons as advanced above in traverse of its parent claim 21, and thus is not anticipated by Jones. With respect to obviousness under 35 U.S.C. §103, the Office Action identifies no differences between Jones and claim 23. The Examiner, it is submitted, has not established *prima facie* obviousness for claim 23 and the rejection should therefore be reversed.

3. Claims 4, 5, 9 through 20 are not unpatentable over Jones in view of Bartholomew under 35 USC § 103(a).

Claims 4 and 5 are dependent from claim1 and further recite particulars of the AIN network that effect retrieving an interexchange carrier identity. Claims 9 through 11 are dependent from claim1 and recite AIN network functionality involved with triggering in the common channel signaling network.

Claim 12 is dependent from claim 11 and requires a determination of whether dialed information received from the calling station corresponds to information stored in the subscriber CPR for the calling station. This claim feature corresponds to the operational mode in which predefined conditions are stored in the CPR for a particular call. For example, storage of the called number in the caller's CPR might be indicative that a call to the particular called number is to be attempted to be routed through the Internet if monitored quality therein is adequate. Claims 13 and 14 are dependent from claim 12 and respectively specify area code and telephone number as the dialed information recited in claim 12.

Claims 15 through 20 are dependent from claim 9 and specify various criteria steps for determining the level of quality of service.

The Office Action states the rejection at pages 4 and 5. It is submitted that it is not clear which of the claimed elements are considered by the Examiner to differ from Jones. Bartholomew is relied upon for teaching the use of an AIN control network for retrieving Interexchange carrier identity, at page 4, and for teaching an interface having a processor, router, packet assembler/disassembler, and voice compression/decompression capability. Various other features of the claims discussed above apparently fall into the Examiner's categorization of being well known, without reference to any prior art teachings. There is no discussion in the Office Action of how Jones is to be modified to incorporate all of these so-called well known features.

Appellant submits that a person of ordinary skill in the art with both applied references considered, would have found no suggestion to combine the teachings to modify Jones. The Jones distribution network and head-end are not part of the PSTN and not subject to AIN routing supervision. It is submitted that the artisan would not have found a suggestion to incorporate the AIN system in the Jones network, but would have been unduly challenged as to how such

incorporation would be implemented even if given the suggestion.

A person of ordinary skill in the art, for example, would have found no reason from the reference teachings to provide retrieval of a cable subscriber's choice of Interexchange carrier identity in the Jones system as disclosed. As the dialed input is used only for POTS calls through the cable system, the artisan would have found no reason to store a call processing record (CPR) for the cable subscriber in PSTN AIN. The artisan would have found no need to provide the selective and predefined options corresponding to the dependent claims in Jones because Jones discloses the quality monitoring-shared/unshared connection for all data packet calls. The Examiner has provided no rationale as to why it would have been obvious to extend the Jones disclosed shared/unshared concept to voice telephone calls which would be alternatively transmitted in data packet format or PSTN telephone format. While it may have been obvious that Jones would employ a PAD (packet assembler/disassembler), a processor and a router for use in data packet network transmission, Jones has no suggestion for incorporating voice compression and decompression capability in an interface between the head-end and the Internet (Fig. 3). This deficiency is not overcome simply because voice compression and decompression *per se* are well known, for example, as disclosed by Bartholomew.

CONCLUSION

For the reasons advanced above for non anticipation, appellant respectfully urges that the rejection of claims 1, 6 through 8 and 21 as being anticipated by Jones under 35 USC § 102(e) should not be sustained.

For the reasons of non-obviousness advanced above, appellant respectfully urges that the rejection of claims 2, 6 and 23 as being unpatentable over Jones under 35 USC § 103(a) and the

rejection of claims 4, 5, 9 through 20 as being unpatentable over Jones in view of Bartholomew under 35 USC § 103(a) should not be sustained.

Reversal of all rejections of record is respectfully solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

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Gene Z. Rubinson
Registration No. 33,351

600 13th Street, N.W.
Washington, DC 20005-3096
(202) 756-8000 GZR:lnm
Date: April 4, 2000
Facsimile: (202) 756-8087

APPENDIX

1. A method for providing voice communication between stations at two remote locations that are each linked to public switched telephone networks (PSTNs) comprising the steps of:

in response to placement of a voice telephone call by a first one of said stations, determining quality of service of a public data packet network;

comparing the quality of service obtained in said determining step with a predetermined threshold level for said voice telephone call;

in response to a result in said comparing step that said predetermined threshold level is exceeded, routing said telephone call to a second one of said stations through said public data packet network in packet data format; and

routing said voice telephone call to said second station through an interexchange carrier switched voice network in PSTN network protocol if said predetermined threshold level is not exceeded.

2. A method as recited in claim 1, wherein placement of said telephone call comprises the step of entering a unique service code.

4. A method as recited in claim 1, wherein the PSTN of the calling station is an advanced intelligent network (AIN) that includes an integrated services control point (ISCP) having stored therein subscriber call processing records (CPRs), and said completing step comprises retrieving an interexchange carrier identity.

5. A method as recited in claim 4, wherein said interexchange carrier identity is specified in the subscriber CPR of the calling station.

6. A method as recited in claim 1, wherein said step of routing comprises exchanging signaling messages between the public switched telephone networks and said data packet network through interfaces.

7. A method as recited in claim 6, wherein said data packet network is the Internet.

8. A method as recited in claim 6, wherein said interfaces are gateway routers and said routing step comprises:

determining that the destination station is not busy; and

establishing a circuit in said data packet network between a gateway router connected to the PSTN of the calling station and a router connected to the PSTN of the destination station.

9. A method as recited in claim 1, wherein the PSTN of the calling station is an advanced intelligent network (AIN) that includes an integrated services control point (ISCP) having stored therein subscriber call processing records (CPRs), and said comparing step comprises retrieving a stored threshold value from the subscriber CPR of the calling station.

10. A method as recited in claim 9, wherein said determining step comprises triggering said ISCP in response to input of a unique service code at the calling station.

11. A method as recited in claim 9, wherein said determining step comprises triggering said ISCP in response to an off hook condition at the calling station.

12. A method as recited in claim 11, wherein said determining step further comprises the step of ascertaining if dialed information received from the calling station corresponds to information stored in the subscriber CPR for the calling station; and

said comparing step occurs in response to a correspondence result in said ascertaining step.

13. A method as recited in claim 12, wherein said dialed information is area code.

14. A method as recited in claim 12, wherein said dialed information is destination telephone number.

15. A method as recited in claim 9, wherein said determining step comprises:

transmitting at least one data packet through said data packet network;

receiving at least one response packet; and

measuring the round trip time duration therebetween.

16. A method as recited in claim 9, wherein said determining step comprises:

transmitting a plurality of data packets through said data packet network;

receiving a response packet for each data packet transmitted in said transmitting step;

successively measuring the round trip time duration between each data packet transmitted in said transmitting step and receipt of its corresponding response packet; and

ascertaining variance among said round trip time durations obtained in said measuring step.

17. A method as recited in claim 15, wherein said threshold level is exceeded if the time duration measured in said measuring step is less than a stored value in the calling station CPR.

18. A method as recited in claim 16, wherein said threshold level is exceeded if said variance in said ascertaining step is less than a stored value in the calling station CPR.

19. A method as recited in claim 9, wherein said determining step comprises transmitting at least one sample packet to said dtaa packet network that requests reservation of a minimum bandwidth level to be dedicated among intermediary data packet network elements.

20. A method as recited in claim 19, wherein said threshold level is a predetermined bandwidth level below which a call is routed through the PSTN network.

21. A communications network comprising:

a switched telecommunications network having interconnected central office switching systems and having subscriber lines connected to said central office switching systems providing connection between terminals connected to said subscriber lines, each of said central office switching systems responding to a service request on a subscriber line connected thereto to selectively provide a communication connection between the requesting line and another selected subscriber line through the connected central office switching system or through the connected central office switching system and at least one other central office switching system;

a separate control network for said switched telecommunications network comprising a common channel interoffice signaling network including signal transfer points connected to said central office switching systems through signal switching points via links between said signal switching points and signal transfer points;

a data network separate from said switched telephone network comprising multiple remotely spaced routers for linking together paths of said data network using transmission control protocols to provide connectionless packet service between remote locations of said data network;

at least two of said central office switching systems having connected thereto an interface to said data network, said central office switching systems providing selective connection between said interfaces and the subscriber lines connected to each of said central office switching systems;

wherein each interface includes capability to invoke a quality test application for determining the quality of service in said data network; and

wherein said control network comprises means responsive to the quality of service in the data network for selectively routing a voice call originating from a first central office switching system to a second central office switching system destination through said data network only if said quality of service exceeds a predetermined threshold level.

22. A communication network as recited in claim 21, wherein said control network comprises means responsive to the quality of service in the data network for selectively routing a voice call originating from a first central office switching system to a second central office switching system destination through said data network if said quality of service exceeds a threshold level.

23. A communication network as recited in claim 21, wherein said data network is the Internet.

24. A communication network as recited in claim 23, wherein said interface is an Internet module that further comprises:

a processor having router and packet assembler and disassembler capabilities; and

means for compressing and decompressing voice data.